Revolving Funds (SRF/SWQIF/DWRF)

Design Phase Guidance

Michigan Department of Environmental Quality

Jennifer M. Granholm, Governor Steven E. Chester, Director



http://www.michigan.gov/deq

Administered by:

The Environmental Science and Services Division Revolving Loan and Operator Certification Section Chip Heckathorn, Chief P.O. Box 30457 Lansing, MI 48909 517-373-4725

September 2008

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability or political beliefs. Questions or concerns should be directed to the MDEQ Office of Human Resources, P.O. Box 30473, Lansing, MI 48909.

TABLE OF CONTENTS

A.	Competitive Bidding Required	3
B.	Construction Management Projects	3
C.	Design-Build Projects	4
D.	Minimal Cost Procurements	5
E.	Sole Source Procurements	5
F.	Request for Quotes/Qualifications Process Projects	6
G.	Requirements for SRF/DWRF Plans and Specifications	6
H.	Requirements for SWQIF Plans and Specifications	7
l.	Bid Allowances	7
J.	Base Bidding	8
K.	Alternates	8
L.	Contractor Pre-Qualification	8
M.	Force Account Construction and Inspection	8
N.	Part 41/Act 399 Construction Permits	9
Ο.	Submission of Plans and Specifications	9
P.	Addenda to Approved Design Documents	10
Q.	Mailing Addresses	10

A. Competitive Bidding Required

In most cases, contracts for project construction of \$50,000 or more must be awarded through an open, competitive bidding process whereby a solicitation to bid is made by means of a formally advertised public notice. Exceptions to this requirement are discussed below in Sections B through F. Unless otherwise approved by your Michigan Department of Environmental quality (MDEQ) project manager, an advertisement for bids must be published at least 30 days prior to the date on which bids are scheduled to be opened. Although not mandatory, bid advertisements are normally published in *Michigan Contractor and Builder*.

B. Construction Management Projects

Construction management (CM) involves an owner using a third party to manage the procurement and administration of construction contracts. That third party can be the design engineer or a contractor who specializes in CM. The CM services are detailed in a contract between the owner and the CM firm and normally include the services that a general contractor would typically provide. The construction work itself is then broken down into trade categories — such as electrical, masonry, mechanical, painting, roofing, and so on — which will be provided by trade contract providers. The key difference between a CM project and the typical construction project is that these trade contracts are usually between the CM firm and the trade contract providers, although a variant has the trade contracts being between the owner and the trade contract providers. The CM services contract will detail the role of the CM firm and stipulate which party — CM firm or owner — will contract with the trade contract providers.

The intent of the CM process is to save money, by replacing the standard 15 percent overhead rate charged by a general contractor with a lower fee charged by the CM firm. Also, since the subcontracting cost in many trade categories will be less than \$50,000, loan program competitive bidding requirements will not apply to those trade contracts. Thus, the owner or CM firm will not be required to solicit multiple quotes for those contracts but can instead use the trade contract provider of its choice. The CM process also allows for liquidated damages, bonding, and other contract issues to be tailored for each contract, based on the nature and the size of the scope of work. Consequently, the performance and payment bonds may be absent from trade contracts developed using the CM process.

Where the owner contracts directly with the individual subcontractors, owners are cautioned to examine their in-house capabilities to administer multiple contracts, which will require more active participation. Additionally, making sure the entire job is adequately bonded is an area that needs to be examined more closely, since bonding requirements are satisfied by each subcontractor rather than through the CM.

CM projects are eligible for loan assistance provided a number of conditions are met:

Notification of the owner's intent to use CM needs to be made by no later than
the date set in the executed project milestone schedule for the submission of
draft plans and specifications. This notification must identify <u>all</u> of the trade
contracts that will be handled under CM, with the estimated cost for each
contract. All equipment — such as generators, pumps, or SCADA — which will be

acquired by the owner for installation by a CM trade contract provider must also be identified at this time.

- 2. The owner or CM firm will be required to satisfy loan program competitive bidding requirements for any trade contract or equipment acquisition estimated to cost \$50,000 or more. Loan participation in any trade contract or equipment acquisition that is not competitively bid will be limited to \$50,000.
- 3. No subcontracts, which have the CM self-performing work, will be approved. Despite the competitive bidding requirements for each subcontract greater than \$50,000, the appearance of a conflict of interest is created where the CM is evaluating the performance, change order requests, or quotations for its own trade contracts.
- 4. Work within a specific trade category cannot be subdivided in order to avoid loan program competitive bidding requirements. However, the acquisition of equipment by the owner for installation by a trade contractor will not be considered a circumvention of this requirement
- 5. DEQ approval of final plans and specifications will still be required.
- 6. The Part II Application submittal must include a copy of the executed CM services contract.
- 7. The Part III Application submittal must include (a) adequate supporting documentation (e.g., proposals or quotes) for those trade contracts that are less than \$50,000 and (b) copies of the bid advertisement(s), bid tabulations, successful bidders' proposals, and the resolutions of tentative contract award for all competitively-bid construction contracts.
- 8. No CM contracts, which provide for a guaranteed maximum price (GMP) prior to receiving quotes/bids on subcontracts, will be approved. As such, the GMP is not a competitively bid price. Construction costs for the loan award will be based on the subcontractor quotes/bids received.

C. Design-Build Projects

The design-build (D-B) procurement concept is an alternative to the traditional design, bid, and then build process. The D-B contractor provides both project design and construction through a single contract with the owner. Thus, one contractor, either a single firm or a consortium, is responsible for designing and constructing the project. The intent of D-B is to save both time and money, in part by eliminating the potential conflict between the designer and the builder that can arise during project construction.

The procurement of a D-B contractor is normally handled through a two-phase process. The owner will first issue a Request for Proposals (RFP), which will include a clearly defined scope of work and performance requirements. Potential D-B contractors will send proposals to the owner that include information on their qualifications and proposed technical approach to the project. After assessing the responding firms' expertise and prior accomplishments, the owner will initiate a second phase in which a short list of

qualified firms are allowed to submit detailed proposals to design and construct the project.

D-B projects are eligible for loan assistance provided several conditions are met:

- 1. Completion of the State Environmental Review Process and MDEQ approval of the project plan will <u>not</u> be required prior to issuance of the RFP. However, the D-B process must be tailored to ensure the submittal of a final project plan that includes all of the elements identified in state law (MCL§324.5303) and its attendant rules (Mich. Admin. Code R323.952 for SRF/SWQIF and MCL§324.5405 for DWRF) so that the MDEQ can rank the cost-effective alternative on the state's annual project priority list. Additionally, the municipality/water supplier should evaluate any environmental requirements or mitigation that may need to be defined in the RFP.
- 2. The RFP issued by the municipality/water supplier will be accepted by the MDEQ as equivalent to "a set of plans and specifications suitable for bidding" to meet the requirements of MCL§324.5308(1)(e). Submittal of the information specified in Items 3 and 4 below will allow the MDEQ Order of Approval to be processed prior to the required issuance of a Part 41, Sewerage Systems, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)/Safe Drinking Water Act, 1976 PA 399, as amended (Act 399) construction permit; refinancing will no longer be necessary.
- 3. The Part II Application submittal must include adequate documentation of the procurement process, including a copy of the RFP(s) and the short list of qualified firms.
- 4. The Part III Application submittal must include a tabulation of the cost proposals made by the qualified firms and the proposal submitted by the selected contractor.

D. Minimal Cost Procurements

Competitive bidding requirements will be waived when the cost of a good or service to be procured as part of a loan project will be less than \$50,000. Goods might include material such as pipe or equipment such as pumps, while services might include compaction testing by an independent contractor.

Minimal cost procurements are eligible for loan assistance provided the municipality/water supplier's Part II Application submittal includes adequate documentation that the cost of the good or service is less than \$50,000.

E. Sole Source Procurements

Competitive bidding requirements will be waived when a good or service needed as part of a loan project is only available from one source.

Sole source procurements are eligible for loan assistance provided the municipality/water supplier's Part II Application submittal includes a justification for using a good or service that is only available from one source and the basis for its estimated cost.

5

F. Request for Quotes/Qualifications Process Projects

Competitive bidding requirements can be waived when the municipality chooses to use a Request for Quotes/Qualifications (RFQ) process to accomplish project construction on a SWQIF loan project. Under the RFQ process, the municipality would establish a list of pre-qualified contractors for its SWQIF project construction. Each homeowner targeted for project construction, or the municipality, would then enter into an agreement with one of the pre-qualified contractors to perform the private property work necessary for the completion of the SWQIF loan project.

Construction under the RFQ process is eligible for SWQIF loan assistance provided a number of conditions are met:

- 1. Notification of the owner's intent to use the RFQ process needs to be made by no later than the date set in the executed project milestone schedule for the submission of draft plans and specifications.
- 2. The list of pre-qualified contractors established by the RFQ process must include a sufficient number of licensed contractors to accomplish the timely completion of the municipality's project.
- 3. The Part II Application submittal must include a copy of the list of pre-qualified contractors and an explanation of how it was obtained.

Please note that a municipality need not utilize the RFQ process but may instead choose to accomplish SWQIF project construction by hiring a contractor through the use of the standard competitive bidding process.

G. Requirements for SRF/SWQIF/DWRF Plans and Specifications

Section 5308(1)(e) (SRF/SWQIF) and Section 5409(1)(f) (DWRF) of the NREPA, requires a municipality/water supplier applying for loan assistance to prepare and submit "a set of plans and specifications suitable for bidding." Design documents will meet this requirement if:

- 1. The final design documents present a project that corresponds with the one described in the state-approved project plan;
- 2. The final design documents include a bid proposal form which allows the segregation of costs for all items that are not eligible for loan assistance;
- 3. The final design documents include the current debarment certification form to be signed by each successful bidder or trade contract provider who will provide a service of \$25,000 or more;
- 4. The final design documents meet the requirements in Part 41 of the NREPA and its related administrative rules for approvable plans and specifications for the SRF/SWQIF and Act 399 and its related administrative rules for the DWRF. In particular, the design documents must conform to the design standards and guidance provided in the Recommended Standards for Wastewater Facilities (SRF/SWQIF)/Recommended Standards for Water Works (DWRF) published

by the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (commonly known as the Ten State Standards); and

5. The final design documents were prepared and sealed by a professional engineer registered in Michigan. The design engineer may either be a qualified employee of the municipality/water supplier that is applying for SRF loan assistance or a consulting engineer hired by the municipality/water supplier on a contractual basis.

The proper SRF/SWQIF/DWRF project number, including the project segment suffix if appropriate, should appear on the cover of the contract documents, specifications books, and plan sheets. The procedure for the submittal, review, and approval of design documents is outlined in Section M below.

Under state law, the municipality/water supplier applying for loan assistance is responsible for obtaining all federal, state, and local permits, or clearances that are required for the project and must perform any surveys or studies that are required in conjunction with such permits or clearances. All appropriate provisions, conditions, and mitigative measures included in such studies, surveys, permits, or clearances must be incorporated into the final design documents.

H. Requirements for SWQIF Plans and Specifications

Two types of projects can qualify for SWQIF loan funding: (a) projects to remove clear water (groundwater or storm water infiltration or inflow) from sanitary or combined sewer house leads and (b) projects to replace or upgrade failing on-site septic systems (OSSS) that are adversely affecting public health or the environment. Generic plan sheets and specifications — as opposed to site-specific documents for each property — will suffice for clear water removal projects. Site-specific health department permits will suffice as plans and specifications for an OSSS project. The permits for all OSSS sites must be received by the MDEQ project manager at least one week before the quarterly design document approval deadline, which will require the municipality to provide sufficient lead time (perhaps months) for the local health department review/approval.

Bid Allowances

To a certain extent, allowances circumvent the bidding process because the value of the allowance is specified by the project owner. Municipalities and their consultants are encouraged to avoid the use of allowances and, instead, fully develop specifications to enable bidders to competitively establish the cost of each good and service in the construction contract. However, many types of bid allowances can receive funding if appropriate documentation is provided to your MDEQ project manager to support both the need for the allowance and its estimated cost. Please contact your MDEQ project manager if you have any questions about the possible use of an allowance.

A type of allowance that is <u>not</u> eligible for inclusion in a loan is one that is not linked to specific goods or services. Such allowances are typically identified as "allowance for differing site conditions" or "provisional allowance" in the design documents. This type of allowance is deemed to be an ineligible addition to the standard 6 percent contingency that will be included in the loan. Further information regarding bid allowances can be

found in the Eligibility Guidances for the Drinking Water and the Clean Water State Revolving Fund.

J. Base Bidding

Specifications may reference equipment that is to be supplied by naming the model produced by a particular manufacturer. Traditionally, such specifications include a caveat that the bidder may instead supply equipment from a different manufacturer that meets the particulars in the owner's specification (the "or equal" approach). Another approach is base bidding, where the model produced by a particular manufacturer <u>must</u> be supplied. Base bidding may be used in a project to provide compatibility with existing equipment, reduction of operation or maintenance costs, or a proven track record of performance. Please contact your MDEQ project manager if you have any questions about the possible use of base bidding.

K. Alternates

Alternates are additional items or project enhancements that are not part of the base bid. Alternates are structured to provide for greater flexibility in meeting budget goals. If bids come in under budget, the owner may accept alternates that, when added to the base bids, do not exceed the authorized construction budget. Under certain circumstances, the alternates may be deductive, where bidders are requested to offer amounts to be deducted from the lump sum bid based on a savings from choosing the alternate.

Alternates are allowable to the extent that they are consistent with and address the critical needs identified in the project plan and meet requirements of Part 41/Act 399 construction permits. Both project management and district engineering staff will review alternatives for programmatic and technical acceptability.

L. Contractor Pre-Qualification

In most cases, the assessment of a contractor's qualifications and apparent ability to meet the requirements of the contract must occur during the evaluation of bid proposals. Pre-qualification of contractors prior to bidding may be considered only where it can be justified based on special expertise requirements that would limit the availability of capable contractors. Notification of the owner's pre-qualification process, the rationale for its use, and the actual description of the owner's pre-qualification process must be submitted no later than the date set in the executed project milestone schedule for the submission of draft plans and specifications.

M. Force Account Construction and Inspection

The use of municipal/water supplier employees to construct a project (force account labor) may be approved for assistance when all of the following conditions are met:

- 1. The construction work can be effectively performed by permanent staff on the current payroll of the applicant, or the municipalities for which the project is being constructed.
- 2. The total labor cost (salaries, fringe benefits, travel expenses) is less than \$50,000.

- 3. The employees involved in project construction will perform the construction work concurrent with their regular duties, without the hiring of any additional staff.
- 4. The applicant can demonstrate that force account labor will be cost-effective when compared with contracted labor.

A municipality/water supplier may use its own staff to perform resident inspection of project construction, either independent from or concurrent with resident inspection performed by a contracted engineering firm. The documentation necessary to support the inclusion of a municipality/water supplier's resident inspection costs is outlined in the "Instructions for Completing the Project Cost Worksheet" that accompanies the SRF/SWQIF/DWRF Part II Application. Services are only eligible if specifically linked to the project and actual hours are documented on timesheets.

N. Part 41/Act 399 Construction Permits

To obtain an SRF loan for a project involving the construction or alteration of a wastewater transport or treatment facility, the municipality must obtain a construction permit issued under the provisions of Part 41 of the NREPA. To obtain a DWRF loan for a project that involves the construction or alteration of drinking water supply, storage, transmission or treatment facility, the water supplier must obtain a construction permit issued under the provisions of Act 399. An application for this construction permit must be submitted to the appropriate MDEQ district office by no later than the date set in the executed SRF/DWRF project milestone schedule for the submission of final design documents.

A municipality will not need a Part 41 of the NREPA construction permit for a SWQIF loan project. Instead, local building codes and inspections will cover the work on private property needed for a clear water removal project and site-specific permits from the local health department will cover the work done for an OSSS upgrade or replacement.

O. Submission of Plans and Specifications

A municipality/water supplier applying for loan assistance for a competitively-bid construction project, a CM project, or a D-B project will need to do the following:

- Submit two sets of the draft design documents (plan sheets, specification books, and contract documents) to the MDEQ project manager in accordance with the executed project milestone schedule. In cases where mailing delays are likely, you may send one set of the draft documents directly to the appropriate MDEQ district office provided you notify your MDEQ project manager.
- 2. Revise the draft design documents to address all comments received from your MDEQ project manager and the MDEQ district staff.
- 3. Submit one set of the final design documents to the MDEQ project manager and at least three sets directly to the MDEQ district office, again in accordance with the executed project milestone schedule. Additional sets may be submitted to the district office in cases where a stamped, approved set of design documents is desired by parties other than the applicant municipality/water supplier (e.g., a copy for the municipality/water supplier's consulting engineer or, on a county-administered project, a copy for the local government's representative).

A municipality/water supplier applying for SWQIF loan assistance for an RFQ process project will need to do the following:

- For a clear water removal project, submit <u>one</u> set of the generic plan sheets and specifications to the MDEQ project manager in accordance with the executed project milestone schedule.
- 2. For an OSSS project, submit <u>all</u> of the site specific permits issued by the local health department to the MDEQ project manager in accordance with the executed project milestone schedule.

P. Addenda to Approved Design Documents

In cases where a modification of the approved final design documents is found to be necessary, an addendum needs to be prepared for issuance to all prospective bidders. The addendum does not have to receive MDEQ approval prior to its issuance; however, as soon as one has been prepared, the municipality/water supplier must submit three sets of each addendum to the MDEQ project manager for review and approval.

If the MDEQ staff can approve the addendum, the project manager will send a stamped, approved copy of the addendum to the municipality/water supplier. If the MDEQ staff cannot approve the addendum, the project manager will work with the municipality/water supplier's design engineer to correct all deficiencies so that a revised addendum can be issued. If the time remaining before the opening of bids does not permit the issuance of a revised addendum to all prospective bidders, then either the bid opening must be delayed or the required corrections must be made by means of a change order issued after the contract has been awarded.

Q. Mailing Addresses

Items sent through the U.S. Postal Service, such as notifications of owner's intent, should be sent to your MDEQ project manager at the following address:

Revolving Loan and Operator Certification Section Environmental Science and Services Division Department of Environmental Quality P.O. Box 30457 Lansing, MI 48909-7957

Bulky items sent through a parcel delivery service, such as plan sheets and books of contract documents or specifications, should be sent to your MDEQ project manager at the following address:

Revolving Loan and Operator Certification Section Environmental Science and Services Division Department of Environmental Quality Constitution Hall 3 South 525 West Allegan Street Lansing, MI 48933